



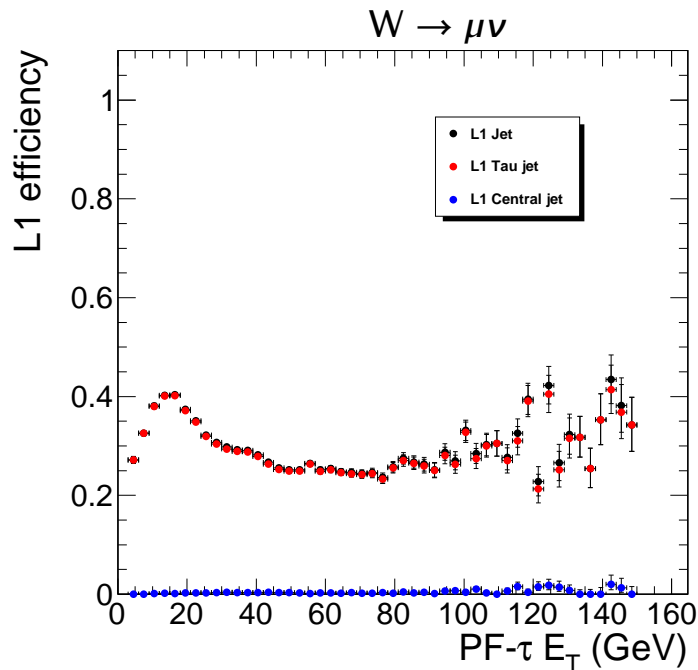
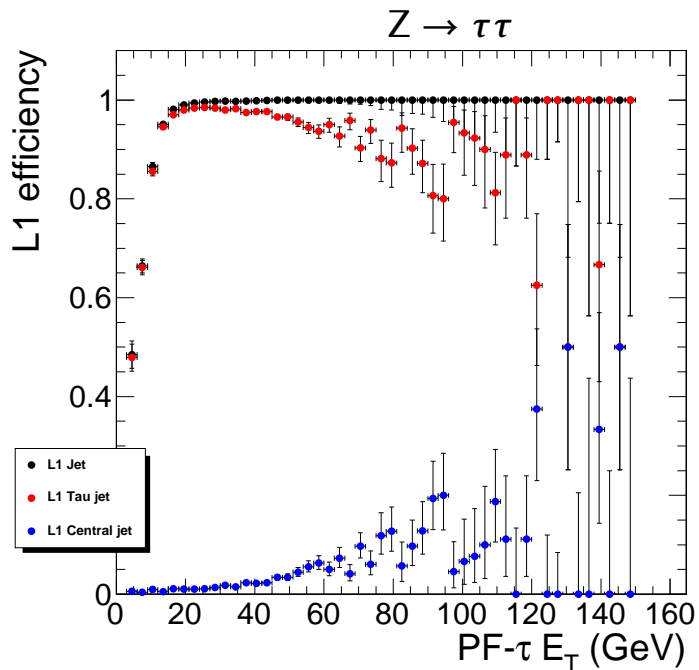
# L1 $\tau$ trigger efficiency status

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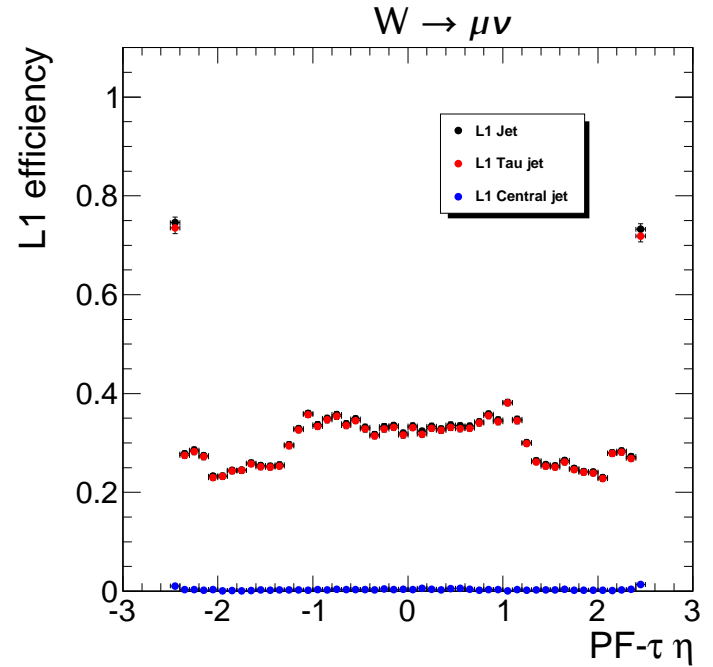
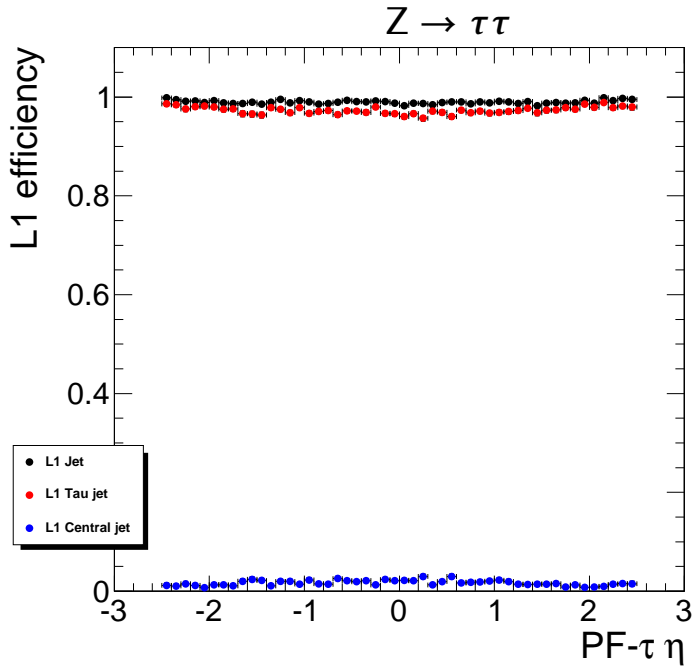
- $Z \rightarrow \tau\tau$  data sample
  - `tteff_octoberX_Ztautau_Summer09_MC_31X_V3_v1.root`
  - 250k entries
  - `PFTauEt > 10 && TMath::Abs(PFTauEta) < 2.5 && PFTauIso == 1 && MCMatch == 1`
- $W \rightarrow \mu\nu$  data sample
  - `tteffAnalysis_Wmunu_Summer09_MC_31X_V3_v1_GEN_SIM_RECO_Skim_run2.root`
  - 646k entries
  - `PFTauEt > 10 && TMath::Abs(PFTauEta) < 2.5 && PFTauIso == 1`
- L1 efficiency =
  - L1 jet reconstruction efficiency  $\times$
  - L1  $E_T$  threshold efficiency  $\times$
  - L1 TauVeto efficiency

# L1 jet reconstruction efficiency ( $E_T$ )

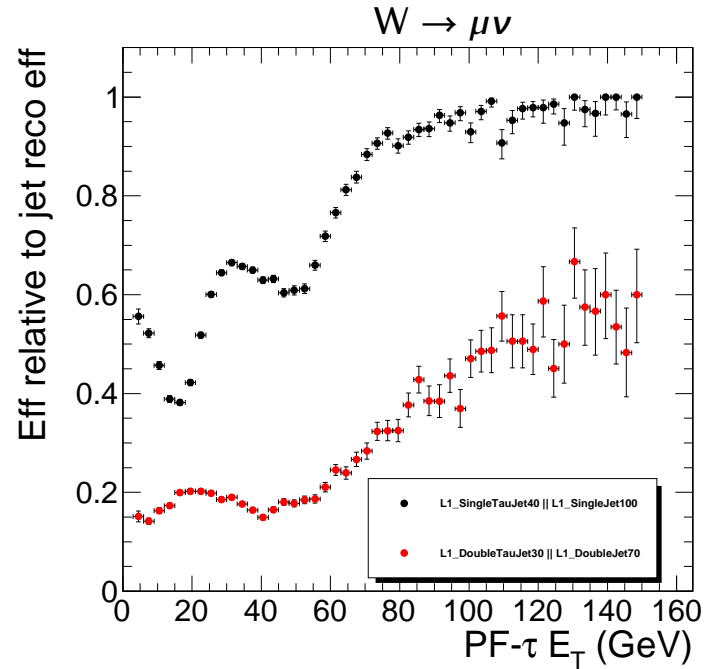
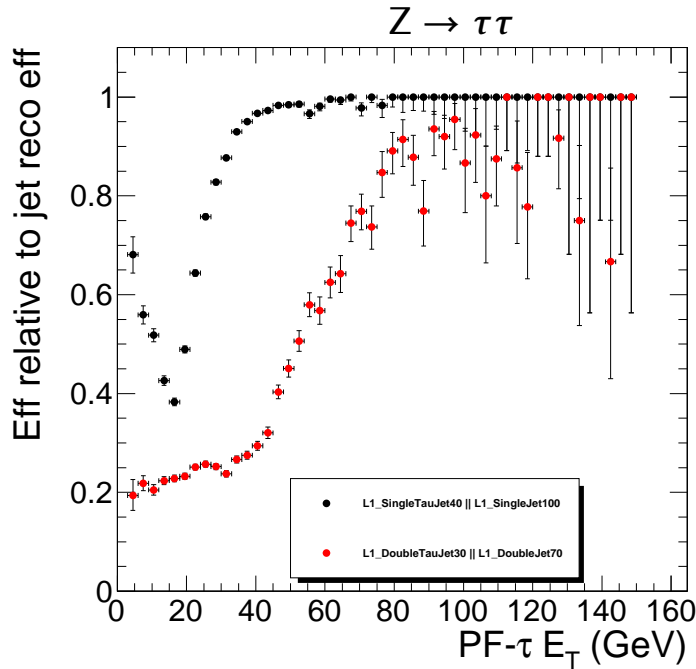


- Efficiency =  $\frac{\text{L1 central OR } \tau \text{ jet}}{\text{PF-}\tau}$
- No  $E_T$  cut

# L1 jet reconstruction efficiency ( $\eta$ )

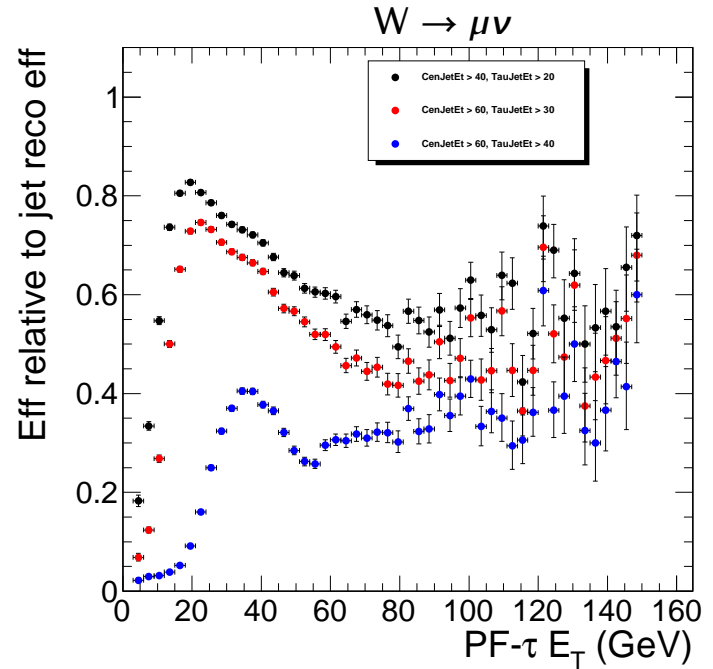
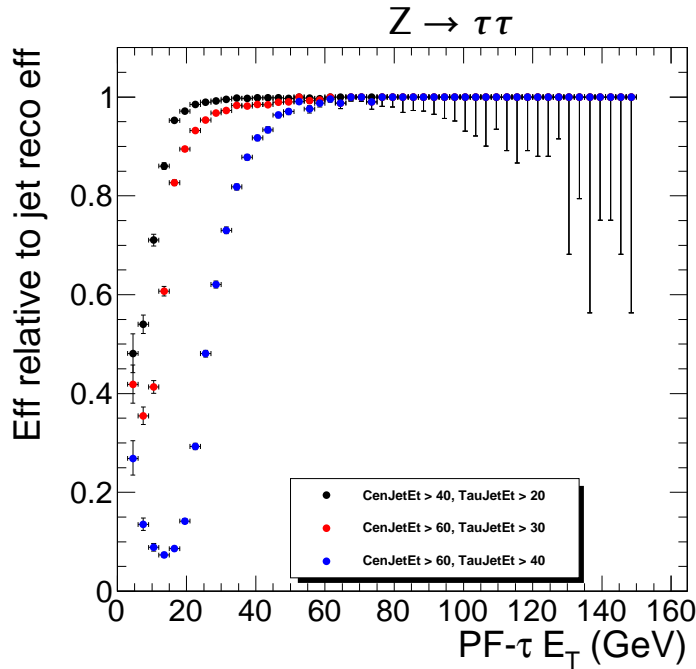


- Efficiency =  $\frac{\text{L1 central OR } \tau \text{ jet}}{\text{PF-}\tau}$
- No  $\eta$  cut



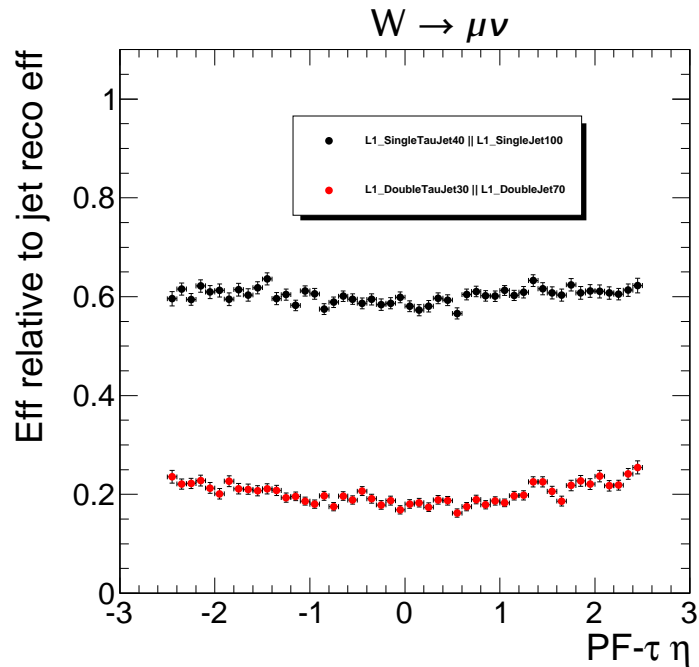
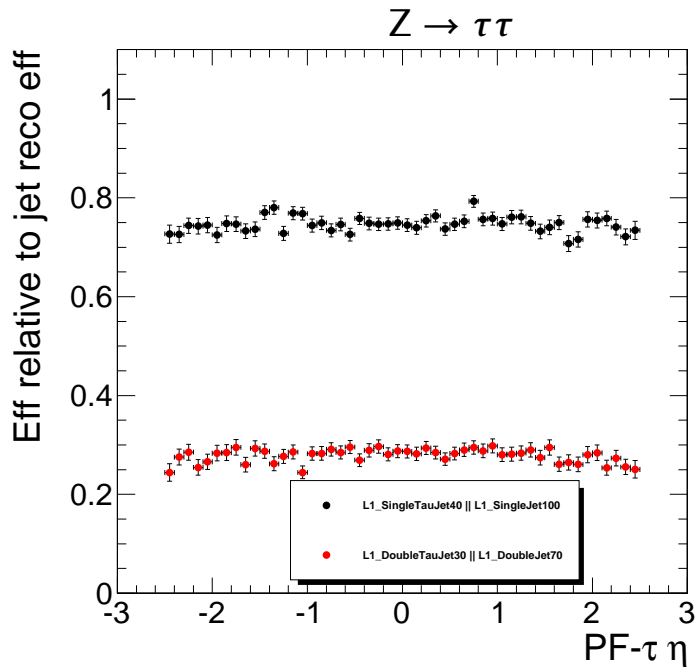
- Efficiency relative to the jet reconstruction efficiency
- No  $E_T$  cut

# L1 jet $E_T$ threshold efficiency ( $E_T; 2$ )



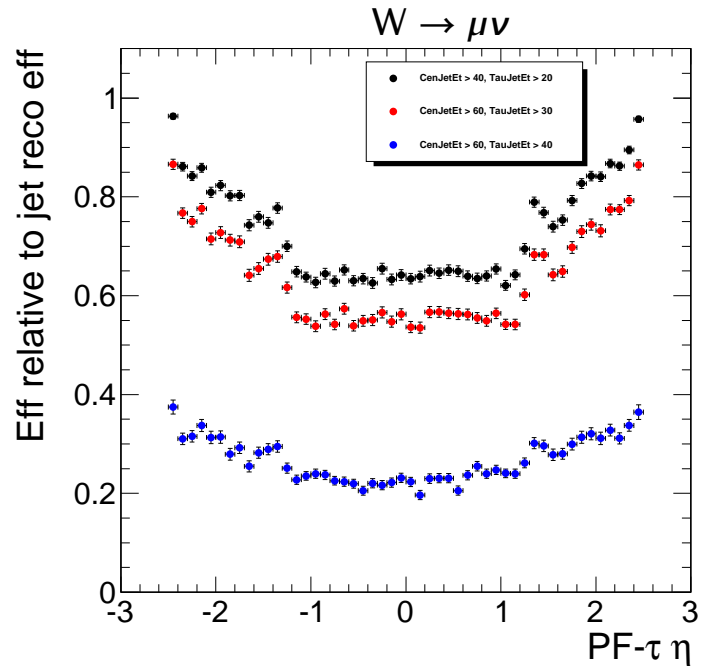
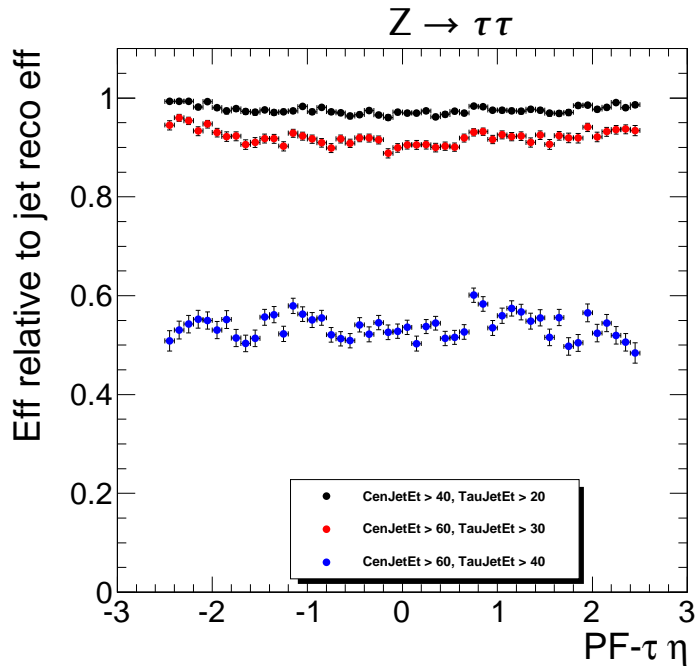
- Efficiency relative to the jet reconstruction efficiency
- No  $E_T$  cut

# L1 jet $E_T$ threshold efficiency ( $\eta; 1$ )



- Efficiency relative to the jet reconstruction efficiency
- No  $\eta$  cut

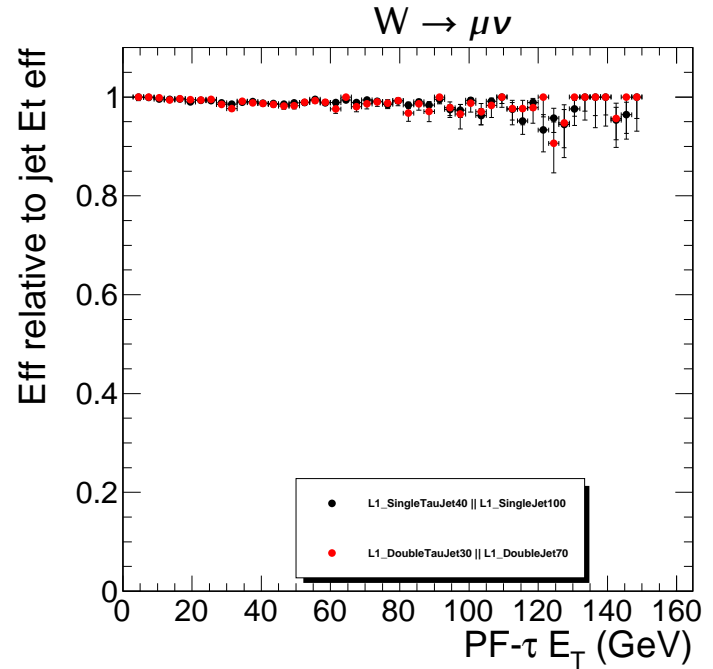
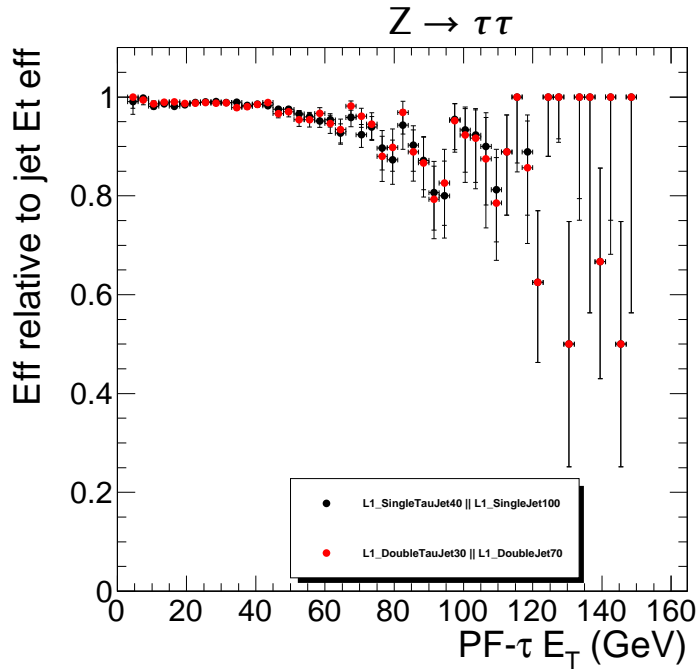
# L1 jet $E_T$ threshold efficiency ( $\eta; 2$ )



- Efficiency relative to the jet reconstruction efficiency
- No  $\eta$  cut

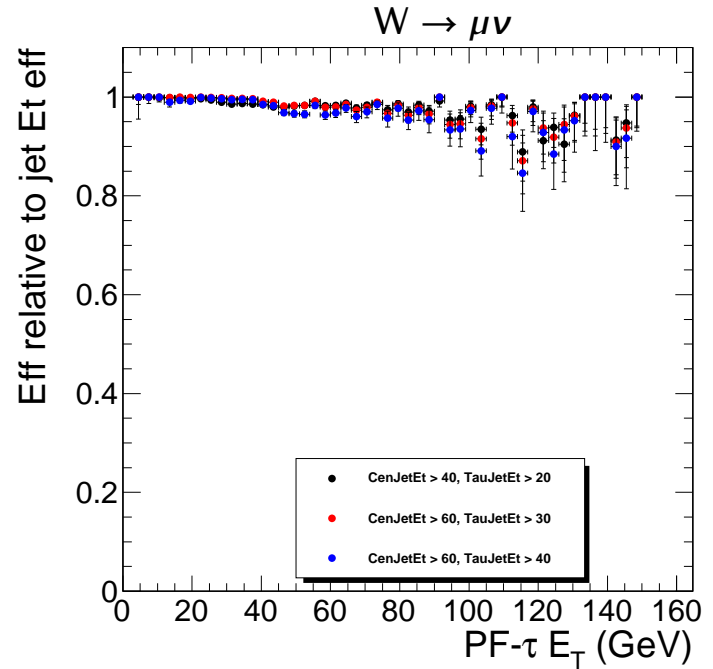
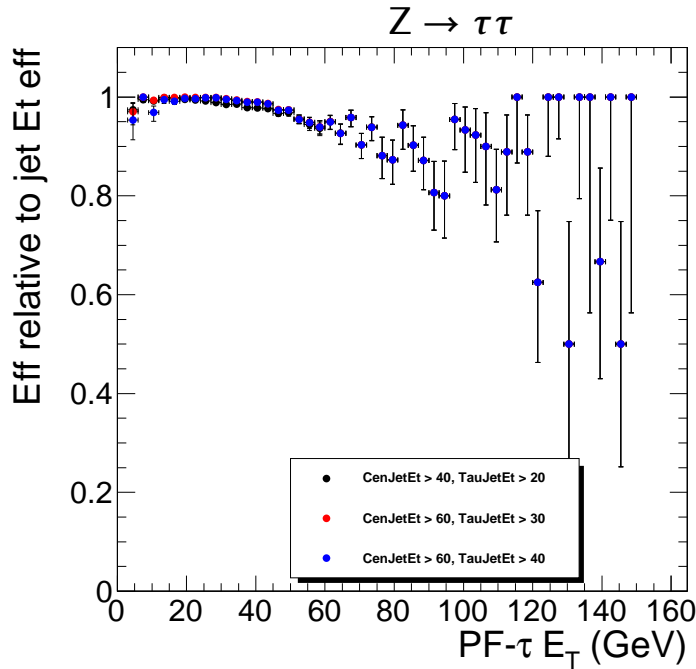


# L1 TauVeto efficiency ( $E_T; 1$ )



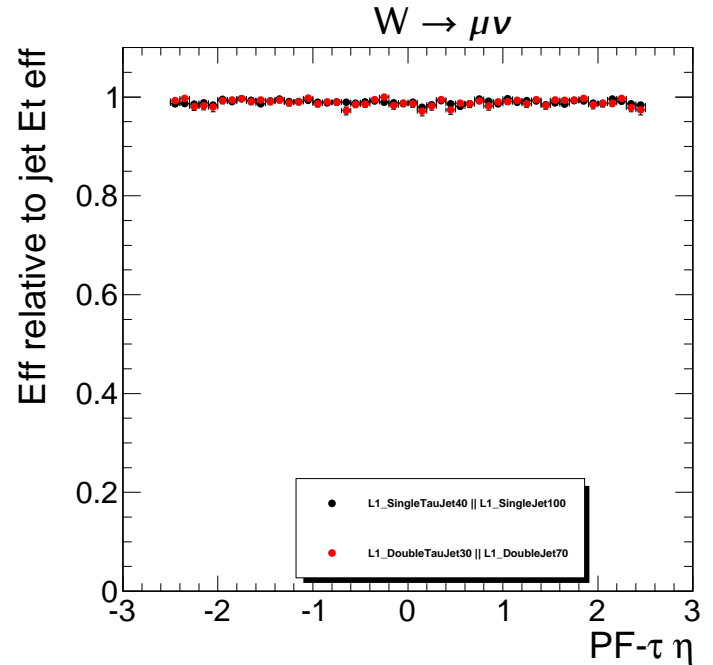
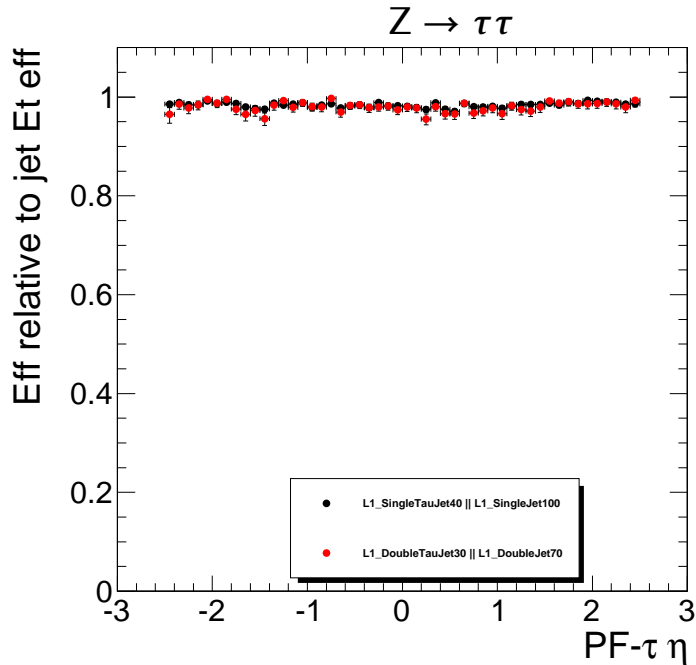
- Efficiency relative to the jet  $E_T$  threshold efficiency
- No  $E_T$  cut

# L1 TauVeto efficiency ( $E_T$ ; 2)



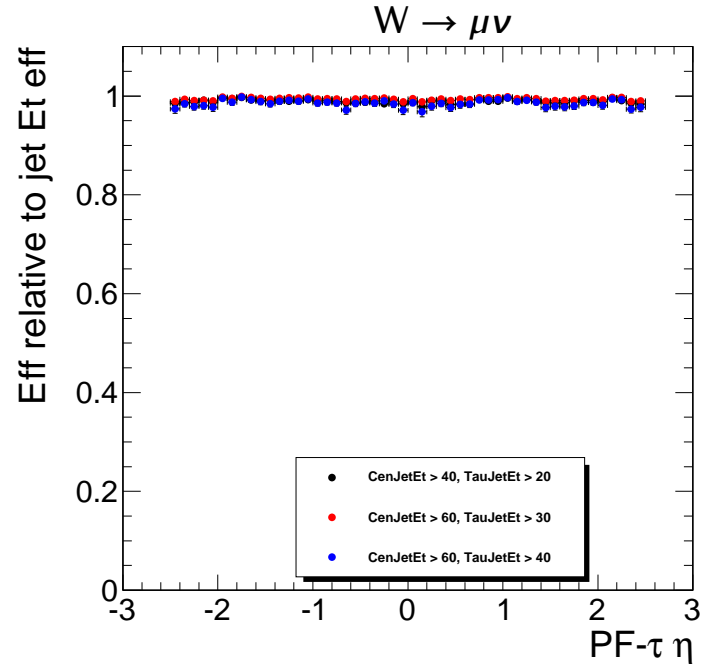
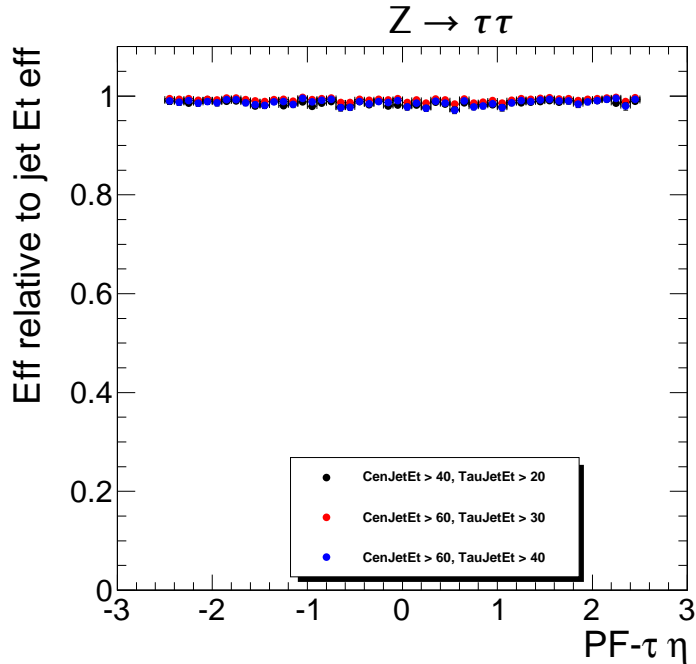
- Efficiency relative to the jet  $E_T$  threshold efficiency
- No  $E_T$  cut

# L1 TauVeto efficiency ( $\eta; 1$ )



- Efficiency relative to the jet  $E_T$  threshold efficiency
- No  $\eta$  cut

# L1 TauVeto efficiency ( $\eta$ ; 2)



- Efficiency relative to the jet  $E_T$  threshold efficiency
- No  $\eta$  cut